



# **STIC Search Report**

## **EIC 2800**

**STIC Database Tracking Number 14898**

**TO: Kenneth Whittington**

**AU 2862**

**Location: JEF-7A24**

**2/28/2005**

**10/685,680**

**From: Jeff Harrison**

**Location: STIC-EIC2800**

**JEF-4B68**

**Phone: 22511**

**Email: harrison, jeff**

### **Search Notes**

**Re: Method: Compare a map of a group of servo sectors/bursts with a reference map to determine if any sectors/bursts are missing**

**Attached are search result from patent and nonpatent literature.**

**I tagged three patents, but I suggest that you browse the results.**

**If you have questions or comments, or would like further searching or assistance, let me know.**

**Respectfully,**

  
**Jeff Harrison**

**Team Leader, STIC-EIC2800**

**JEF-4B68, 571-272-2511**



# STIC Search Results Feedback Form

3

**EIC 2800**

Questions about the scope or the results of the search? Contact **the EIC searcher or contact:**

Jeff Harrison, EIC 2800 Team Leader  
571-272-2511, JEF 4B68

## Voluntary Results Feedback Form

➤ I am an examiner in Workgroup:  Example: 2810

➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature  
(journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

**Comments:**

**Drop off or send completed forms to STIC/EIC2800, CP4-9C18**



144898

# SEARCH REQUEST FORM Scientific and Technical Information Center - EIC2800

Rev. 3/15/2004 This is an experimental format -- Please give suggestions or comments to Jeff Harrison, JEF-4B68, 272-2511.

Date	2-10-05	Serial #	101685680	Priority Application Date	
Your Name	Kenneth W. Hington			Examiner #	78599
AU	2862	Phone	272-2264	Room	JEF-7A24
In what format would you like your results? Paper is the default. PAPER DISK EMAIL					

If submitting more than one search, please prioritize in order of need.

The EIC searcher normally will contact you before beginning a prior art search. If you would like to sit with a searcher for an interactive search, please notify one of the searchers.

Where have you searched so far on this case?

Circle: USPT DWPI EPO Abs JPO Abs IBM TDB

Other: \_\_\_\_\_

What relevant art have you found so far? Please attach pertinent citations or Information Disclosure Statements. \_\_\_\_\_

What types of references would you like? Please checkmark:

Primary Refs \_\_\_\_\_ Nonpatent Literature \_\_\_\_\_ Other \_\_\_\_\_  
 Secondary Refs \_\_\_\_\_ Foreign Patents \_\_\_\_\_  
 Teaching Refs \_\_\_\_\_

What is the topic, such as the **novelty**, motivation, utility, or other specific facets defining the desired **focus** of this search? Please include the concepts, synonyms, keywords, acronyms, registry numbers, definitions, structures, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract and pertinent claims.

- Servo Bursts / Sectors Map/List  
 - Flaws / Missing  
 - Compare  
 - Reference Map/List

Staff Use Only		Searcher	Type of Search	Vendors	Structure (#)
Searcher:	HARRISON	Structure (#)		STN	
Searcher Phone:	22511	Bibliographic	X	Dialog	X
Searcher Location:	STIC-EIC2800, JEF-4B68	Litigation		Questel/Orbit	
Date Searcher Picked Up:	2-25	Fulltext	X	Lexis-Nexis	
Date Completed:	2-28-05	Patent Family		WWW/Internet	
Searcher Prep/Rev Time:	63	Other		Other	
Online Time:	71				

# SEARCH REQUEST FORM

## Scientific and Technical Information Center

Requester's Full Name: Kenneth Whittington Examiner#: 78599 Date: 2/10/05  
 Art Unit: 2802 Phone Number: 30 22264 Serial Number: 101685680  
 Mail Box and Bldg/Room Location: 7A24 JEF Results Format Preferred (circle): Paper Disk E-mail

**If more than one search is submitted, please prioritize searches in order of need.**

\*\*\*\*\*

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: High Throughput Missing Pattern Detector for Servo Printed Recording Media  
 Inventors (please provide full names): Shih-fu Lee, David Kuo, Jason Pressesky

Earliest Priority Filing Date: 10/15/03

*\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

I have the structural features of the hard disk drive. However I am looking for the method wherein a map or list of detected servo-bursts or servo-sectors is compared to a prerecorded map to determine if any servo-bursts/sectors are missing.

IC G 11 B 005 / 86

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### STAFF USE ONLY

	Type of search	Vendors and cost where applicable
Searcher: _____	NA Sequence (#) _____	STN _____
Searcher Phone: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) _____	Questel/Orbit _____
Date Searcher Picked Up: _____	Bibliographic _____	Dr. Link _____
Date Completed: _____	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: _____	Full Text _____	Sequence System _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: _____	Other _____	Other (specify) _____

28feb05 12:39:58 User259284 Session D3091.6

SYSTEM:OS - DIALOG OneSearch

File 350:Derwent WPIX 1963-2005/UD,UM &amp;UP=200513

(c) Thomson Derwent

File 347:JAPIO Nov 1976-2004/Oct(Updated 050208)

(c) JPO &amp; JAPIO

File 94:JICST-EPlus 1985-2005/Jan W3

(c)2005 Japan Science and Tech Corp(JST)

Set	Items	Description
S1	105499	SERVO????????????
S2	94	S1 AND MISSING
S3	1243	S1 AND MAP????????
S4	109	S1 AND LIST????????
S5	3275	S1 AND IMAG????????
S6	4574	S1 AND PATTERN??????
S7	37	S1 AND OVERLAY????????
S8	1639	S1 AND SUBTRACT??????
S9	10946	S1 AND COMPAR??????
S10	7222	S1 AND REFERENC??????
S11	46	S2 AND S3:S10
S12	12	S7 AND S2:S6
S13	4	S7 AND S8:S10
S14	102	8AND9AND10
S15	5	S2:S6 AND S14
S16	0	2AND7
S17	0	4AND7
S18	1	4AND2
S19	19	S12:S13 OR S15:S18
S20	19	RD S19 (unique items)
S21	9	S20 AND (MAGNETIC??? OR HARD?? OR DISC?? OR DISK?? OR HDD? ? OR DRIVE??)
S22	0	S20 AND (BURST???? OR SERVOBURST????? OR CROSSBURST?????)
S23	579	S1 AND (BURST???? OR SERVOBURST????? OR CROSSBURST?????)
S24	325	S2:S20 AND S23
S25	87	S24 AND COMPAR??????
S26	93	S24 AND REFERENC??????
S27	4	S24 AND SUBTRACT?????
S28	0	S24 AND OVERLAY??????
S29	29	25AND26
S30	48	S19 OR S29
S31	48	RD S30 (unique items)
S32	37	S31 AND (METHOD?? OR SERVOSECTOR??? OR SECTOR???? OR DETEC- T??????)
S33	29	S31 AND (BURST???? OR SERVOBURST????? OR CROSSBURST?????)
S34	25	32AND33

25feb05 15:41:40 User259284 Session D3090.2

File 2:INSPEC 1969-2005/Feb W2 (c) Institution of Electrical Engineers

Set	Items	Description
S1	0	CROSS() BURST?????
S2	0	CROSSBURST?????
S3	0	SERVOBURST?
S4	23	SERVO() BURST?
S5	16	SERVO() SECTOR????
S6	55	SERVO?? (2N) SECTOR????
S7	0	SERVOSECTOR????
S8	28	SERVO?? (4N) BURST?????
S9	317740	PATTERN?????????
S10	12	S1:S8 AND S9
S11	2	S10 AND COMPAR?????????
S12	0	S10 AND STANDARD????????
S13	1	S10 AND MAP???????
S14	0	S10 AND LIST????????
S15	3	S11:S13
S16	8045	SERVOMECHANISM????????
S17	305	SERVO() MECHANISM????????
S18	10605	R1:R4 OR R6:R9
S19	1287	HDD? ?- OR H()D()D
S20	7900	HARD() (DISK???? OR DISC????)
S21	8354	(DISK???? OR DISC????)() DRIV?????
S22	19074	S18:S21
S23	19074	S22 AND S4:S21
S24	78	S22 AND BURST?????
S25	204666	R1:R2
S26	159782	'SENSING DEVICES' OR R6:R30 OR R36:R37 OR R38:R40
S27	3	S23:S24 AND R25:R26
S28	3	S27 NOT S15
S29	0	MISSING?? AND S28
S30	1578	MISSING?? AND-S1:S28
S31	37	S30 AND S16:S21
S32	37	S31 NOT (S27 OR S15)
S33	2	S32 AND LIST?????
S34	1	S32 AND MAP???????
S35	3	S33:S34
S36	4449	FLAW DETECTION (January 1985)
S37	7	S18:S21 AND S36
S38	6	S37 NOT (S35 OR S27:S28)
S39	1065	MAGNETIC RECORDING NOISE (January 1995)
S40	19502	FAILURE ANALYSIS (January 1969)
S41	140	S18:S21 AND S39
S42	46	S18:S21 AND S40
S43	1	41AND42
S44	1	36AND41
S45	1	36AND42
S46	82	S9 AND S39
S47	733	S9 AND S40
S48	24	S41:S42 AND S46:S47
S49	14	S35 OR S38 OR S15 OR S27
S50	24	S43:S45 OR S48
S51	23	S50 NOT S49
S52	2	S51 AND REFERENCE??
S53	1	S51 AND STANDARD????????
S54	0	S51 AND PREDETERMIN????????
S55	2	S52:S53
S56	13	S51 AND HARD
S57	11	S56 NOT S55
S58	658756	(DETECT???? OR DETERMIN???????? OR PREDETERMIN?????? OR MEASUR???????? OR SOFTWARE OR PROGRAM?????? OR MAP?????? OR LIST????)/TI.
S59	10	S51 NOT S56
S60	1	58AND59

&lt;-----User Break-----&gt;

---Logging off of Dialog---

28feb05 14:16:37 User259284 Session D3092.2

## SYSTEM:OS - DIALOG OneSearch

File 350:Derwent WPIX 1963-2005/UD,UM &amp;UP=200513

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\*File 350: For more current information, include File 331 in your search.

Enter HELP NEWS 331 for details.

File 347:JAPIO Nov 1976-2004/Oct(Updated 050208)

(c) 2005 JPO &amp; JAPIO

\*File 347: JAPIO data problems with year 2000 records are now fixed.

Alerts have been run. See HELP NEWS 347 for details.

Set	Items	Description
S1	2785	(MANY OR SEVERAL OR PLURAL OR FOUR OR THREE OR FIVE OR SIX OR GROUP) (2N) SECTOR? ?
S2	2287	S1 AND SECTORS
S3	65887	COMPAR???? (5N) REFERENC????
S4	3	2AND3
S5	1	S1 AND (MAP????? OR GRAPH???? OR PLOT????? OR OVERLAY???- ?? OR SUBTRACT????) (8N) PATTERN?????
S6	0	S1 AND (MAP????? OR GRAPH???? OR PLOT????? OR OVERLAY???- ?? OR SUBTRACT????) (8N) BURST?????
S7	0	S1 AND (MAP????? OR GRAPH???? OR PLOT????? OR OVERLAY???- ?? OR SUBTRACT????) (8N) CROSSBURST?????
S8	1	S1 AND (MAP????? OR GRAPH???? OR PLOT????? OR OVERLAY???- ?? OR SUBTRACT????) (8N) SERVO???????
S9	14	S1 AND SERVO() PATTERN?????
S10	0	S1 AND SERVOPATTERN?????
S11	9	FLAW????? AND S1
S12	351	DETECT????? AND S1
S13	4	MISSING AND S1
S14	24	S12 AND REFERENC????
S15	50	S5:S11 OR S13:S14
S16	3	S15 AND SECTOR() GROUP??
S17	6	S15 AND SECTOR???? (2N) GROUP??
S18	6	S16:S17
S19	5	S18 NOT S4
S20	44	S15 NOT (S19 OR S4)
S21	1	S20 AND (MAP????? OR LIST????? OR GRAPH????? OR PLOT?????-) (6N) PATTERN???????
S22	1	S20 AND (MAP????? OR LIST????? OR GRAPH????? OR PLOT?????-) (6N) SECTOR?????
S23	2	S21:S22

? b 256

28feb05 12:21:15 User259284 Session D3091.4

File 256:TecInfoSource 82-2005/Jan  
(c) Info.Sources Inc

Set	Items	Description
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S1	29	SERVO?????????



28feb05 12:23:28 User259284 Session D3091.5

## SYSTEM:OS - DIALOG OneSearch

File 9:Business & Industry(R) Jul/1994-2005/Feb 25  
(c) The Gale Group

File 15:ABI/Inform(R) 1971-2005/Feb 28  
(c) ProQuest Info&Learning

\*File 15: Alert feature enhanced for multiple files, duplicate removal, customized scheduling. See HELP ALERT.

File 16:Gale Group PROMT(R) 1990-2005/Feb 28  
(c) The Gale Group

\*File 16: Alert feature enhanced for multiple files, duplicate removal, customized scheduling. See HELP ALERT.

File 18:Gale Group F&S Index(R) 1988-2005/Feb 28  
(c) The Gale Group

File 20:Dialog Global Reporter 1997-2005/Feb 28  
(c) The Dialog Corp.

File 36:MetalBase 1965-20050105  
(c) The Dialog Corporation

File 80:TGG Aerospace/Def.Mkts(R) 1982-2005/Feb 28  
(c) The Gale Group

File 148:Gale Group Trade & Industry DB 1976-2005/Feb 28  
(c) 2005 The Gale Group

\*File 148: Alert feature enhanced for multiple files, duplicate removal, customized scheduling. See HELP ALERT.

File 160:Gale Group PROMT(R) 1972-1989  
(c) 1999 The Gale Group

File 256:TecInfoSource 82-2005/Jan  
(c) Info.Sources Inc

File 275:Gale Group Computer DB(TM) 1983-2005/Feb 28  
(c) The Gale Group

File 481:DELPHEs Eur Bus 95-2005/Feb W3  
(c) ACFCI & Chambre CommInd Paris

File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13  
(c) 2002 The Gale Group

\*File 583: This file is no longer updating as of 12-13-2002.

File 621:Gale Group New Prod. Annou. (R). 1985-2005/Feb 28  
(c) The Gale Group

File 624:McGraw-Hill Publications 1985-2005/Feb 28  
(c) McGraw-Hill Co. Inc

\*File 624: Homeland Security & Defense and 9 Platt energy journals added  
Please see HELP NEWS624 for more

File 635:Business Dateline(R) 1985-2005/Feb 26  
(c) ProQuest Info&Learning

File 636:Gale Group Newsletter DB(TM) 1987-2005/Feb 28  
(c) The Gale Group

File 647:CMP Computer Fulltext 1988-2005/Feb W2  
(c) CMP Media, LLC

File 674:Computer News Fulltext 1989-2005/Feb W3  
(c) IDG Communications

File 696:DIALOG Telecom. Newsletters 1995-2005/Feb 27  
(c) The Dialog Corp.

Set	Items	Description
S1	856	SERVO?? (2N) DATA
S2	30	SERVODATA
S3	149	SERVO?? (2N) BURST????
S4	2	SERVOBURST????
S5	2	SERVOPATTERN?
S6	173	SERVO?? (2N) PATTERN????
S7	183	CROSS??? (2N) BURST???
S8	0	CROSSBURST???
S9	39	S1:S2 AND S3:S4
S10	20	S1:S2 AND S5:S6
S11	0	S1:S2 AND S7
S12	0	S3:S4 AND S7
S13	12	S3:S4 AND S5:S6
S14	57	S9:S13
S15	0	S14 AND COMPAR????? (6N) REFERENC????
S16	2	S14 AND FLAW????
S17	37	S14 AND TRACK
S18	27	S14 AND TRACKS
S19	0	S14 AND MISSING
S20	4	S14 AND MISS?????
S21	30	S14 AND DETECT??????
S22	9	S14 AND MAP??????
S23	6	S14 AND LIST??????
S24	0	S14 AND PLOT???????
S25	0	S14 AND GRAPH
S26	0	S14 AND GRAPHED
S27	0	S14 AND GRAPHS
S28	0	S14 AND GRAPHING??
S29	2	S14 AND PATTERN????? (3N) (MISS????? OR DETECT????? OR FLAW?- ??? OR MEASUR????? OR SENS??? OR MONITOR?????)
S30	0	S14 AND PATTERN?????? (5N) ANALY???????????
S31	1	S14 AND IMAG???? (8N) SERVO?????????
S32	9	S14 AND REFERENC?????
S33	7	9AND10
S34	7	9AND13
S35	7	10AND13
S36	32	S4:S5 OR S13 OR S16 OR S20 OR S22:S35
S37	25	RD S36 (unique items)
S38	2521	OVERLAY????? (5N) MAP??????
S39	0	OVERLAY????? (5N) SERVOMAP??????
S40	0	OVERLAY????? (5N) SERVOLIST??????
S41	485	OVERLAY????? (5N) LIST??????
S42	461	SUBTRACT????? (5N) LIST??????
S43	485	OVERLAY????? (5N) LIST??????
S44	132	SUBTRACT????? (5N) MAP??????
S45	0	S1:S35 AND S38
S46	0	S1:S35 AND S41
S47	0	S1:S35 AND S42
S48	0	S1:S35 AND S44
S49	0	S1:S35 AND S43
S50	1	SERVOMAP????????
S51	1	S50 NOT S37

28feb05 12:02:28 User259284 Session D3091.2

SYSTEM:OS - DIALOG OneSearch

File 2:INSPEC 1969-2005/Feb W2

(c) Institution of Electrical Engineers

\*File 2: Price change effective Jan 1, 2005. Enter HELP  
RATES 2 for details.

File 6:NTIS 1964-2005/Feb W3

(c) NTIS, Intl Cpyrght All Rights Res

\*File 6: Price change effective Jan 1, 2005. Enter HELP  
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File 8:Ei Compendex(R) 1970-2005/Jan W3

(c) Elsevier Eng. Info. Inc.

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RATES 8 for details.

File 34:SciSearch(R) Cited Ref Sci 1990-2005/Feb W3

(c) Inst for Sci Info

\*File 34: Price change effective Jan 1, 2005. Enter HELP  
RATES 34 for details.

File 35:Dissertation Abs Online 1861-2005/Feb

(c) ProQuest Info&amp;Learning

File 65:Inside Conferences 1993-2005/Feb W4

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File 92:IHS Intl.Stds.&amp; Specs. 1999/Nov

(c) 1999 Information Handling Services

File 94:JICST-EPlus 1985-2005/Jan W3

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File 95:TEME-Technology &amp; Management 1989-2005/Jan W3

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\*File 95: Customers in Germany, Austria, and Switzerland  
should contact their local Dialog representative.

File 99:Wilson Appl. Sci &amp; Tech Abs 1983-2005/Jan

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File 103:Energy SciTec 1974-2005/Feb B1

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\*File 103: For access restrictions see Help Restrict.

File 144:Pascal 1973-2005/Feb W3

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File 239:Mathsci 1940-2005/Mar

(c) American Mathematical Society

File 275:Gale Group Computer DB(TM) 1983-2005/Feb 28

(c) The Gale Group

File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec

(c) 1998 Inst for Sci Info

\*File 434: Price change effective Jan 1, 2005. Enter HELP  
RATES 434 for details.

File 647:CMP Computer Fulltext 1988-2005/Feb W2

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File 674:Computer News Fulltext 1989-2005/Feb W3

(c) IDG Communications

File 696:DIALOG Telecom. Newsletters 1995-2005/Feb 27

(c) The Dialog Corp.

Set	Items	Description
S1	2	SERVOPATTERN?????
S2	0	SERVOSECTOR?????
S3	91	SERVO() DATA?????
S4	264	SERVO?? (2N) PATTERN?????
S5	170	SERVO?? (2N) SECTOR?????????
S6	496	S1:S5
S7	2329937	IMAGE???
S8	1201614	IMAGING??
S9	25439	REFERENCE?? (5N) (LIST????? OR MAP????? OR SERVOLIST???? OR - SERVOMAP????? OR SERVO??)
S10	28	6AND7
S11	12	6AND8
S12	10	6AND9
S13	2011	(S7 OR S8) AND S9
S14	14211	(SIGNAL???? OR SERVSIGNAL????) (3N) (MAP???? OR LIST?????)
S15	12	13AND14
S16	56	S10:S12 OR S15
S17	4	S16 AND GRAPH
S18	5	S16 AND GRAPHS
S19	4	S16 AND GRAPHING??
S20	0	S16 AND GRAPHEd
S21	19	S16 AND TRACKS
S22	8	S16 AND MISS?????
S23	24	S16 AND TRACK
S24	44	S16 AND SERVO????????
S25	3	S16 AND PLOT????????
S26	20	S16 AND COMPAR????????
S27	24	S16 AND REFERENC????
S28	16	S16 AND STANDARD????
S29	13	S16 AND SPACE
S30	8	S16 AND SPACES
S31	6	S16 AND GAP????
S32	7	S17:S19
S33	7	S25 OR S32
S34	26	S21 OR S23
S35	37	S26:S28
S36	23	S22 OR S29:S31
S37	2	24AND32
S38	2	24AND33
S39	20	24AND34
S40	25	24AND35
S41	17	24AND36
S42	7	32AND33AND34
S43	7	32AND33AND34ANDS35
S44	6	32AND33AND34ANDS35AND36
S45	17	39AND40
S46	9	39AND41
S47	13	40AND41
S48	9	46AND47
S49	24	S17:S19 OR S1 OR S22 OR S25 OR S30:S33 OR S37:S38 OR S42:S- 44 OR S46 OR S48
S50	18	RD S49 (unique items)